

TS 2068 DISC SYSTEM

Enhance the performance of your TS 2068 with the **AERCO** Disc System. All of the speed and convenience of a full-out floppy disc system. Save, load and copy programs at the industry standard rate of 250,000 bits/sec. Fully compatible with all Shugart type drives, including those already in use with the **AERCO** 1000 Disc System.

The 8K ROM contains the operating system. When the system is booted, the DOS is loaded into the 64K of extra memory in the DOCK bank, thus preserving the entire usable memory in the computer's HOME bank. The ROM can also be custom programmed to accommodate any combination of disc drive parameters. You can mix or match 3.5" with 5.25" single side with double side and 40 track with 80 track. Upgrading drives simply requires the replacement of the ROM for a nominal charge. (We exchange your old one and re-program it). Finally, as the ROM is continually refined, we can quickly and inexpensively update your system.

The 64K of on-board RAM can be used as a second bank of system memory or for a full-blown RP/M System (runs CP/M 2.2). It provides 8 x 8K chunks located in the DOCK bank and accessible via the TIMEX's bank switching capability. If you need more memory, the 64K can be upgraded to 256K. The upgrade requires some rework of the board and can be performed when purchased or at a later time. There are two versions of the 256K. The first limits the system to a maximum of 2-drives by using the address of drives C&D to decode the extra memory as 3 extra pages of 64K each. If more than 2-drives are required, additional modification is required to the board. We can even provide instructions (and parts) if you prefer to upgrade the system yourself.

The RP/M is now available and very slick. We have optimized the size and number of sectors on the disc to provide a buffer that stores the maximum data everytime the disc is accessed resulting in less disc time and a faster system. The display is a full 80 column (the standard for CP/M software) whether the TIMEX display is used or the optional ASCII terminal. The terminal is a must for any serious full time application of the RP/M. These ADDS Viewpoint terminals consist of a 12-inch green screen monitor that displays 24 lines of 80 columns and a 72-key detached PC type keyboard with 10-key numeric pad.

The RGB output is crystal clear and rock steady. The power supply is a 5-amp high efficiency switcher. We offer a variety of other hardware for all models of sinclair-TIMEX.

The **AERCO** Disc System for the TS2068 consists of the following major components. The FD-68 Floppy Disc Interface, one to four disc drives and an external power supply.

In addition to control logic, the disc interface includes a System Diskette, 8K of ROM, 64K of RAM, RGB output, 2068 Bus Feed-Thru and an Instruction Manual. The system diskette has about 200K of utility programs. Some of these are: Serial and Parallel Print Drivers, Terminal Emulator, Header program, Bank Monitor program, animated Demonstration program, and Operating Notes. The 8K ROM contains the Operating System. Automatic features include System Boot from reset and update of Directory entries. The 64K of Dynamic RAM occupies the Dock Bank. It provides space for the Operating System, Spectrum Emulation, alternate program space and RP/M. It can be upgraded to a full 256K. The RGB output provides separate red, green, blue, horizontal and vertical sync signals. An adapter is available to individually switch horizontal and vertical sync signals either positive or negative. The 2068 Bus feed thru extends the entire bus so that additional devices can be attached to the rear of the computer. The manual explains how to connect and operate the system. Examples and technical documentation are included. It is also available separately.

The disc drive provides mass storage similar to a phono record, only much more dense. Disc drives also provide rapid random access directly to any point on the disc from any other point. Any Shugart type drive can be used in this system. All Shugart drives assign the same signals to each pin of the connector and are therefore interchangeable. The drive we provide is 5", double sided, and double density (48 tpi) with 40 tracks per side and 6Ms track to track step rate. Maximum storage for a formatted disc is 395K bytes. If you use different drives, be sure to specify the just mentioned parameters for each position (A,B,C,D) so that the ROM can be properly programmed. Also be sure to set the drive select and terminating resistor properly for each drive. Additional information is provided in the Instruction Manual.

The Drive Case includes the Power Supply and Signal Cable. The case holds 2 of our 2/3 height drives. The power supply is needed for the disc drives and, if the computer's 5 volt supply is weak, the interface also. We provide information for the necessary mod. The supply is rated for 5 amps total at +5 volts and +12 volts. The signal cable is the Shugart standard 34 conductor ribbon cable used to connect the interface to the drives. Our standard configuration provides signal and power connections for 2 drives, even with single drive orders. If you do not purchase the cabinet, signal and power connections must be provided for.

If possible, we recommend a dual drive system. It allows for simpler and quicker copy of disc programs and back-up for system failures. We can provide documentation on the ROM source code and disc drives as well as assistance on difficult problems or special applications as time permits.